

1. A method for manufacturing a thin film magnetic head comprising a recording pole portion including a first pole portion, a gap film adjacent to the first pole portion and a second pole portion having a first magnetic film and a second magnetic film, the first magnetic film being adjacent to the gap film and having a higher saturated magnetic flux density than the second magnetic film, the second magnetic film being adjacent to the first magnetic film comprising the steps of:

forming a non-magnetic film over the gap film,

forming, in the non-magnetic film, a hollowed hole, exposing the gap film,

having a pattern corresponding to a primary pattern which is larger than a definitive pattern of the first magnetic film,

forming a magnetic film to be the first magnetic film in the primary pattern on the remaining non-magnetic film and the exposed gap film in the bottom of the hollowed hole,

forming the first magnetic film having the primary pattern by flattening the first magnetic film so that the surface of the part of the first magnetic film formed in the hollowed hole can have a substantially same level as that of the surface of the remaining non-magnetic film,

forming a plate underfilm on the patterned first magnetic film and the remaining non-magnetic film,

forming, on the plate underfilm, frames to be used in a frame-plating method for the second magnetic film so as to be separated, on the first magnetic film, in the track direction parallel to the surface of the first magnetic film and cover both edges of the first magnetic film and parts of the remaining non-magnetic film around the edges,

sticking a plate film to be the second magnetic film on the parts of the plate underfilm not covered by the frames,

removing the frames,

removing the parts of the plate underfilm exposed after removing the frames, forming a mask to cover the first and second magnetic films after removing the plate underfilm,

removing the parts of the plate film and the plate underfilm not covered by the mask, and

etching the first magnetic film into the definitive pattern through the second magnetic film as a mask.

2. A method for manufacturing a thin film magnetic head as defined in claim 1, wherein the thin film magnetic head further comprises a reading magnetoresistive effective element.